

FIGURE 1

```

----- Pcd1 ----->
gagaagcaat ragttgatgg gacaccagtc ataaatcaa tccaaacttt -406
-----
tggtgacatg tgtttcttcc tccatatacc aggtccocgc ttcgtattag -356
-----
taagattgaa attgaaataa gtctattgct ggtggatgaa tttgtcactt -306
-----
tccttgaac tggagaacc aaaaagttag acagtgatag gaaaatactg -256
-----
ccattgtctg ttaagaagtc tatgacattt caaggcaaga atgaatatat -206
-----

----- Pcd3 ----->
ggaagagaaa acttggtttct tcttttagta caaaaaggaa agcctggaag -156
-----
tgaatgatat gggataatt aaaaaaaaaa aaaaaacaaa aaacctttac -106
-----
*
<----- Pcd4 -----
gtaacgtttt tgctgggaga gaagactacg aagcacattt tccaggaagt -56
-----
gtgggctgca acgattgtgc gtctttaaact aatcctgagt aaggtggcca -6
-----
<----- Pcd2 -----
-1
ctttg
-----

```

FIGURE 2

Sample	Lane	5'	Poly-A Tract	3'	Length of Tract	Sequence Date
RA ST 06B						
	3	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	23	9/23/98
	5	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	24	9/23/98
	6	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	25	9/23/98
RA ST07 (Male)						
	13	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	23	11/12/97
	15	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	23	11/12/97
	11	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	24	11/12/97
	S12	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	24	10/30/97
RA ST10						
	A	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	22	9/23/98
	B	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	23	9/23/98
	C	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	24	9/23/98
RA ST14						
	3	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	23	9/28/98
	16	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	24	9/23/98
	I	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	24	9/28/98
	D	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	24	9/28/98
RA ST23						
	L	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	23	9/28/98
	D	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	24	9/23/98
	14	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	24	9/28/98
	28	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	24	9/23/98
	I	ATT	AAAAAAAAAACAAAAACAAAAA	CTTT	24	9/28/98
N3 PBL						
	E	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	20	9/23/98
	31	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	22	9/23/98
	18	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	23	9/28/98
	21	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	24	9/28/98
	30	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	24	9/23/98
N7 PBL						
	F	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	20	9/23/98
	H	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	22	9/23/98
	25	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	22	9/28/98
	26	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	22	9/28/98
	39	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	22	9/23/98
	G	ATT	AAAAAAAAAAAAAAAAACAAAAA	CTTT	24	9/23/98

FIGURE 3

SAMPLE	DX	GENDER/ AGE/ ETHNICITY	SEQUENCING ARMS Subclones with C	SEQUENCING SCREENING	+ SEQUENCING CONFIRMATION (Sequence Date)
ST05	RA	F/38/Hi	-	0/6	
ST06A	RA	F/52/CA	-	0/4	
ST06B	RA	F/52/CA	-	0/6	
ST07	JRA	N/41/CA	+	4/4	(10/30/97; 11/12/97)
ST10	RA	F/78/CA	+	3/7	(9/23/98)
ST14	AVN	N/64/CA	+	1/4	(9/28/98 - Confirmation Pending)
ST18	RA		-	0/4	
ST19	RA		-	0/12	
ST20B	RA		-	0/4	
ST23	RA	F/68/CA	+	4/6	(9/23/98; 9/28/98)
ST29	RA	F/62	-	0/3	
ST33	RA	F/54	-	0/5	
ST34	RA	F/63	-	0/5	
ST35	RA	F/70/CA	+	3/5	(10/14/98)
ST36	RA	F/54	-	0/5	
ST38	RA	F/38	-	0/3	
ST39	OA/RA	F/77	-	0/4	
ST46	RA	F/66/CA	-	0/6	
ST51	RA	F/55	-	0/6	
ST52	RA	F/65	-	0/5	
ST53	RA	F/50	-	0/8	
ST55	RA	F/61	-	0/7	
ST60	RA	F/72/CA	-	0/7	
ST61	RA	F/60	-	0/7	
ST64	RA	N/40	-	0/5	
ST67	RA	F/46	-	0/8	
ST97	RA	F/50/CA	-	0/4	
ST28	RA	F/65/CA	-		+ 4/5 (7/20/99)
ST30	RA	F/66/Hi	-		+ 3/5
ST31	RA	F/67/Hi	-		Confirmation Pending
ST37	RA	F/80/CA	-		ND
ST40	OA/RA	F/59/CA	+		+ 2/4 (2/23/99)
ST41	OA	N/63/Hi	+		+ 4/4 (2/23/99)
ST42	JRA	F/50/CA	-		ND
ST43	RA	F/60/CA	-?		- 0/4
ST44	RA	F/75/CA	-?		- 0/5
ST45	RA	F/77/CA	-		ND
ST47	RA	F/53/CA	+		Confirmation Pending
ST50	RA	F/69/CA	+		- 0/5
PB35	RA	F/70/CA	2/5	(1/19/99)	
PB40	OA/RA	F/59/CA	1/4	(10/4/99)	
PB41	OA	N/63/Hi	0/4	(confirmation pending)	
PBMM	RA	F/35/Hi	0/8	(11/1/99; 1/8/99)	
PB1	RA	F/1	6/8		
PB2	RA	F/1	0/7		
PB249	RA	F/72/CA	+		+ 2/2 (7/22/99)
PB440	RA	F/66/CA	+		+ 3/5 (5/12/99)
PB500	RA	F/45/AS	-?		- 0/5
PB512	RA	F/67/CA	+		+ 4/5 (5/12/99)
PB519	RA	F/72/AS	+		- 0/5 (7/27/99)

FIGURE 4

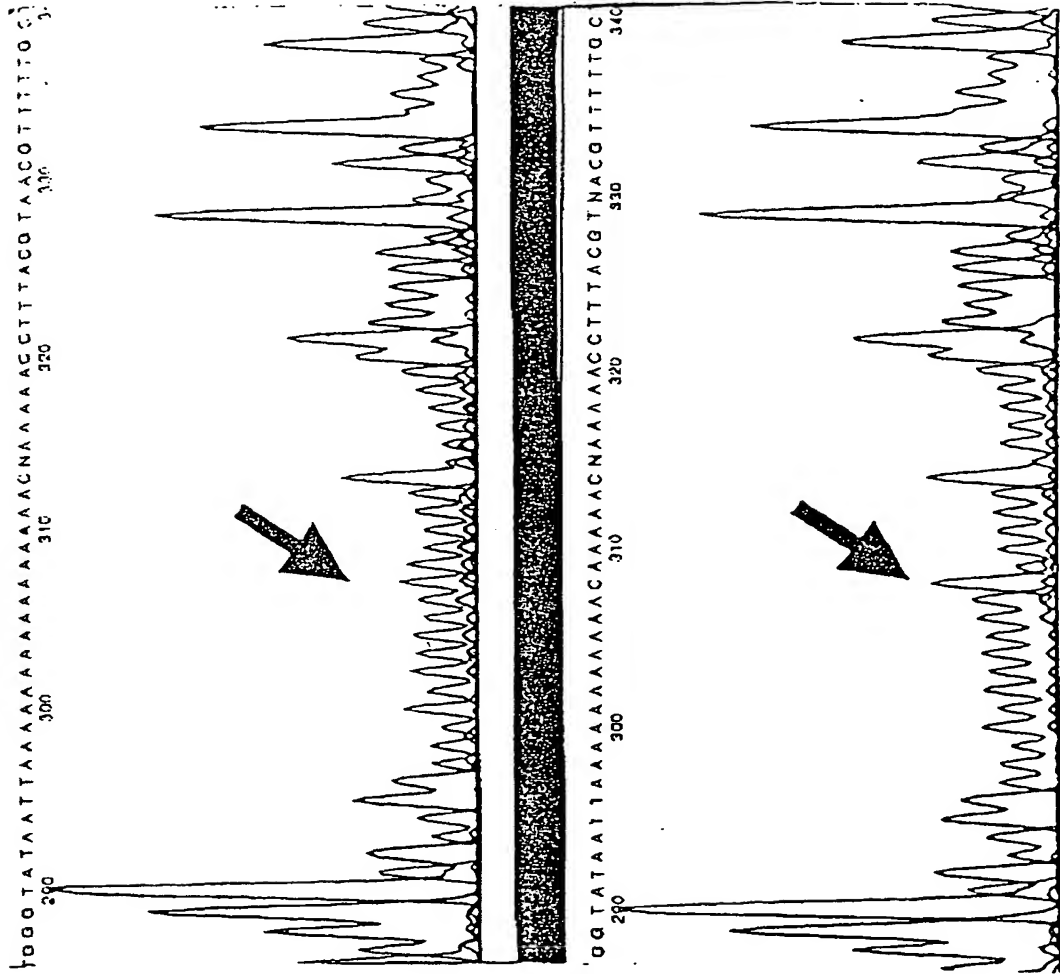


FIGURE 5

SAMPLE	DX	GENDER/ AGE/ ETHNICITY	SEQUENCING ARMS Subcones with C	SCREENING	+ SEQUENCING CONFIRMATION
SLE PERIPHERAL BLOOD (n = 7)					
PB260	SLE	-	0/1		
PB343	SLE	-	0/3		
PB345	SLE	-	0/3		
PB346	SLE	-	0/4		
PB347	SLE	-	0/3		
PB349	SLE	-	0/3		
PB359	SLE	-	0/4		
HEALTHY SUBJECT PERIPHERAL BLOOD (N = 23)					
N1	HEALTHY SUBJECT	-	0/4		
N2	HEALTHY SUBJECT	-	0/3		
N3	HEALTHY SUBJECT	-	0/9		
N4	HEALTHY SUBJECT	-	0/3		
N5	HEALTHY SUBJECT	-	0/4		
N6	HEALTHY SUBJECT	-	0/4		
N7	HEALTHY SUBJECT	-	0/8		
N8	HEALTHY SUBJECT	-	0/3		
N9	HEALTHY SUBJECT	-	0/3		
N10	HEALTHY SUBJECT	-	0/3		
N11	HEALTHY SUBJECT	-	0/3		
N12	HEALTHY SUBJECT	-	0/2		
N13	HEALTHY SUBJECT	-	0/1		ND
N14-N23	HEALTHY SUBJECTS				
FAMILY WITH UNKNOWN MEDICAL HISTORY:					
BCL7007	LYMPHOBLASTOID	+	3/3	(11/2/98)	
BCL7016	CELL LINES FROM	-	0/3		
BCL7050	MEMBERS OF UTAH FAMILY	+	2/3	(11/2/98)	

FIGURE 6

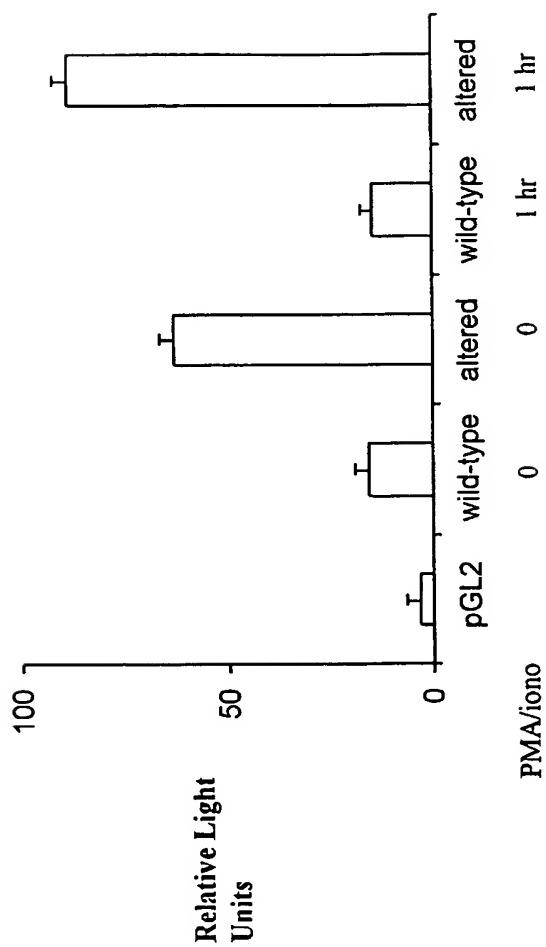


FIGURE 7

Human	5'-TTACAAAAAGG-AA-GCCTGGAAGTGAATGATATGGGTATAATT-3'
Mouse	5'-TTACAAAAAGGAAAGCCCTGGAAAGTGAATGATATGGGTGTGATTT-3'
Human	5'-AAAAAAAAAAAAAAAAAAAAA*--POLY-A
Mouse	5'-AAAAAAAAAGAAAGGAAAGAAAGATTAGAAAAAC TRACT
Human	5'-CCTTACGTAAAGTTTTT-GCTGGGAGAGAAGACTACGAAGCACA-69
Mouse	5'-CCTTACGTAAAGTTTTT GCTGGGACAGAAGACTACGAAGCACA
Human	5'-TTTCCAGGAAGTGTGGGCTGCAACGATTGTGGCTCTTAACTAAT-23
Mouse	5'-TTTCCAGGAAGTGTGGGTTGCCGACGATTGTGGCTCTTAACTAAT
Human	5'-CCTGAGTAAGTGGCCACTTTG 3'
Mouse	5'-CCTGAGTAAGCGGCCCACTTTG

FIGURE 8

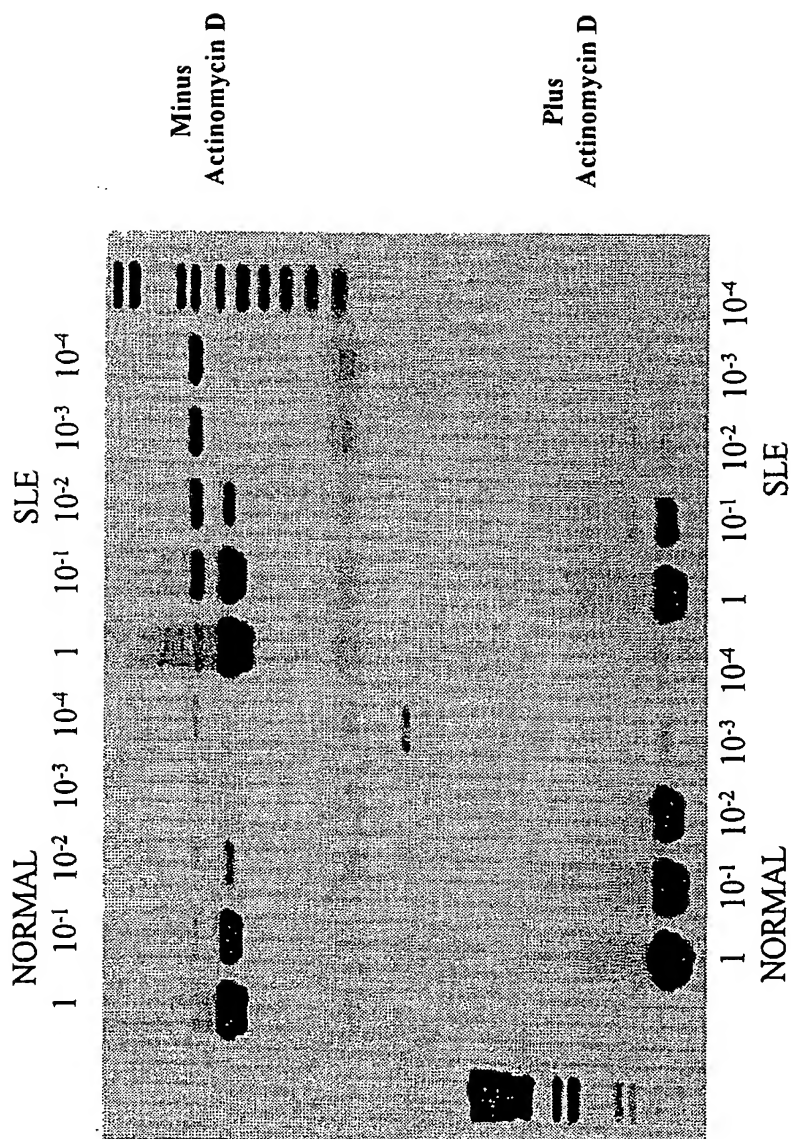


FIGURE 9

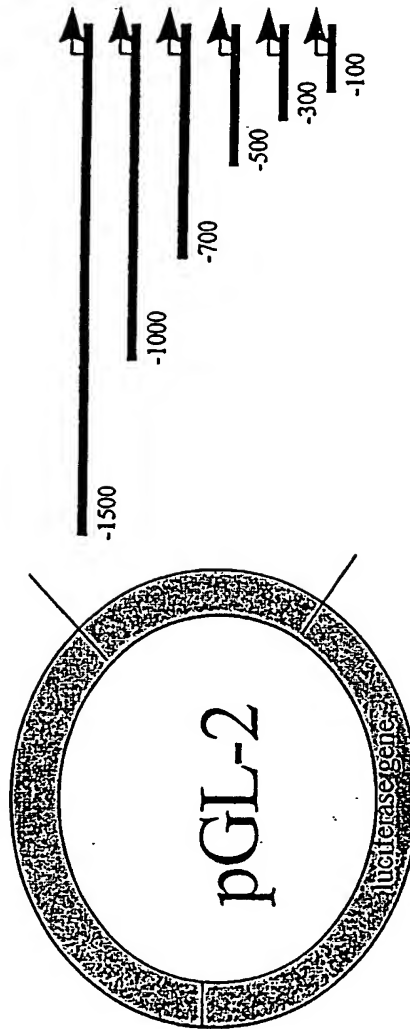


FIGURE 10

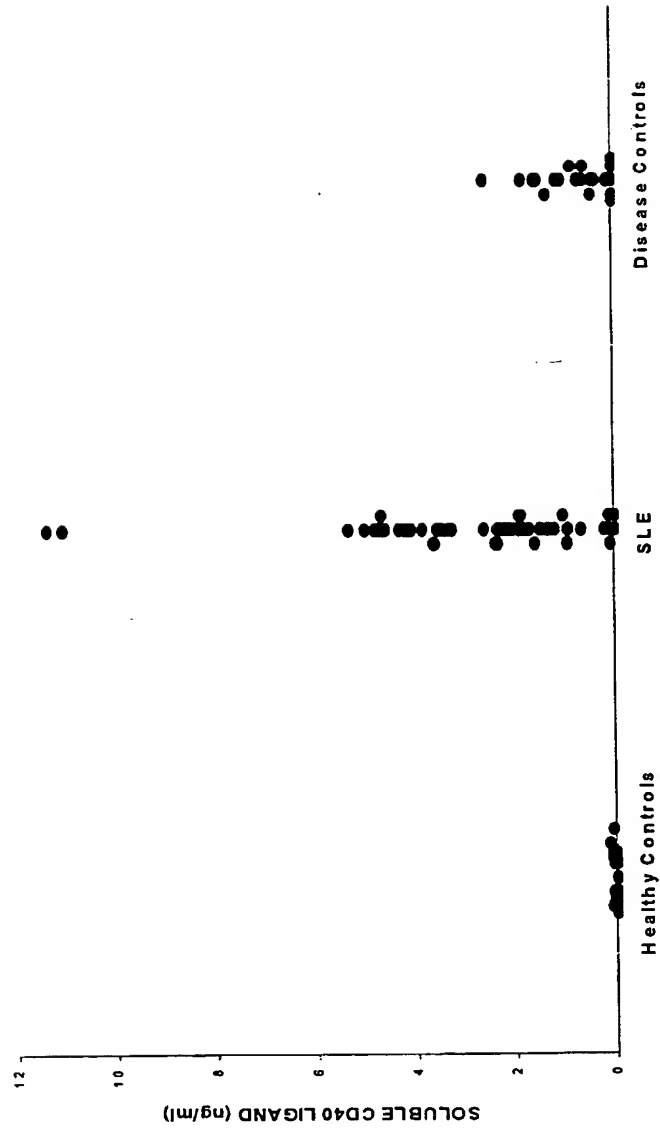


FIGURE 11

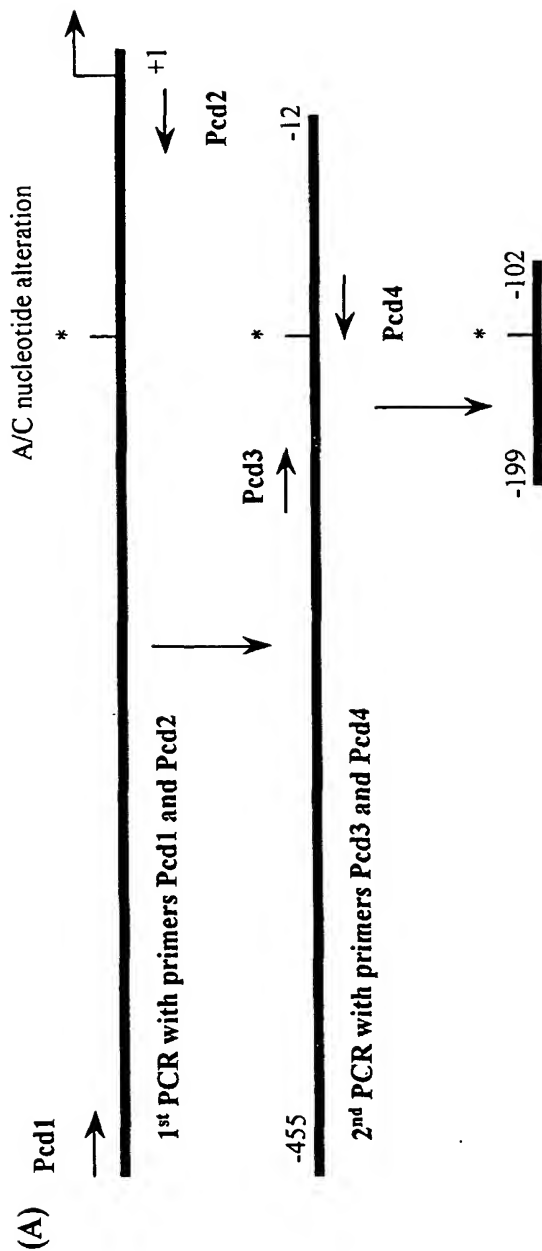


FIGURE 12

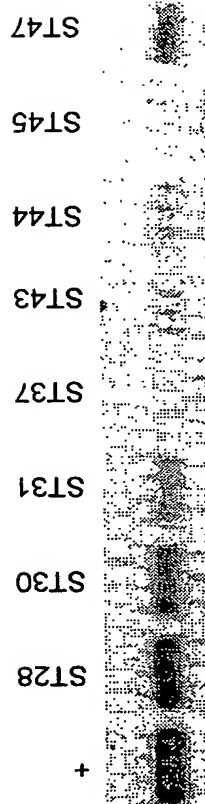


FIGURE 13

PROBABLE GENOTYPE OF POLY-A TRACT:				
	AA	AC	CC	UNSURE
SUBJECTS:				
HEALTHY SUBJECTS	23	0	0	0
RHEUMATOID ARTHRITIS (ST)	27	6	2	3
RHEUMATOID ARTHRITIS (PB)	4	6	0	1
TOTAL RA	31	10	2	3
SLE	7	0	0	0

FIGURE 14